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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/052,308	01/17/2002	Tetsuya Uda	16869P-036400US	8406

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EXAMINER

BELLO, AGUSTIN

ART UNIT	PAPER NUMBER
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2633

DATE MAILED: 02/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/052,308

Applicant(s)

UDA ET AL.

Examiner

Agustin Bello

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 November 2005.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-26 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 14-26 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 17 January 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/18/05 has been entered.

Claim Rejections - 35 USC § 112

2. Claim 16 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The applicant claims that at one of the relay stations the received signal is transmitted without adjusting. However, the specification is silent regarding this feature.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 16 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 14, the applicant recites that each band of the plurality of bands is adjusted. Then, in claim 16, the applicant recites that the received signal is transmitted without adjusting. The invention for which the applicant seeks patent protection is not clear.

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5. Claim 15 recites the limitation "the optical intensity parameters." There is insufficient antecedent basis for this limitation in the claim.

Drawings

6. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the non-adjusting leg of at least one of the relay stations must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 14-15 and 17-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Hainberger (U.S. Patent No. 6,856,453).

Regarding claim 14, 17, 19, and 21, Hainberger teaches receiving a transmitted signal at one of the relay stations as a received signal (reference numeral 10 in Figure 8); separating the received signal into a plurality of bands (reference numeral 31 in Figure 8), adjusting each band to produce a plurality of adjusted bands (via reference numerals 33-41 in Figure 8), including at least one of amplifying optical signals (via reference numerals 33, 38, 39 in Figure 8) comprising each band in accordance with predetermined optical intensity parameters (reference numeral 12, 13 in Figure 8; paragraph [0091]) and adjusting a gain tilt of each band in accordance with predetermined gain tilt parameters (Figure 5); combining the adjusted bands to produce a transmission signal (reference numeral 41 in Figure 8); transmitting the transmission signal to a second relay station (Figure 7) or to the receiving station; and repeating the above steps at one or more of the relay stations.

Regarding claim 15 and 22, Hainberger teaches that the optical intensity parameters and the gain tilt parameters are determined based on transmission characteristics of all spans of

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optical fiber disposed between the sending station, the relay stations, and the receiving station (paragraph [0091]).

Regarding claim 18, Hainberger teaches determining SRS-induced variations further includes computing a sum of signal intensities as they occur at a transmitting end of the span for all wavelength bands which comprise the optical signal (reference numeral 12, 13 in Figure 8; Figure 11).

Regarding claim 20, Hainberger teaches a data store (reference numeral 13 in Figure 8, 11) configured to store the gain tilt parameters and the optical intensity parameters, the data store operatively coupled to the optical circuits to provide the optical intensity parameters and the gain tilt parameters.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 23-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hainberger in view of Chbat (U.S. Patent No. 6,810,214).

Regarding claims 23-26, Hainberger differs from the claimed invention in that Hainberger fails to specifically teach a gain tilt controller comprising an optical filter that is wavelength dependent with regard to light transmission characteristics. However, Chbat, in the same field of multiplexed optical communication, teaches a gain tilt controller comprising an

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optical filter that is wavelength dependent with regard to light transmission characteristics. One skilled in the art would have been motivated to employ a gain tilt controller comprising an optical filter that is wavelength dependent with regard to light transmission characteristics in order to allow the introduction of a negative gain tilt into at least the lower band signal (column 11 lines 9-20 of Chbat). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to employ a gain tilt controller comprising an optical filter that is wavelength dependent with regard to light transmission characteristics in the system of Hainberger as taught by Chbat.

Response to Arguments

11. Applicant's arguments filed 11/18/05 have been fully considered but they are not persuasive. The examiner maintains that the Hainberger teaches predetermined optical intensity parameters (reference numeral 12, 13 in Figure 8; paragraph [0091]).

12. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., feed-forward control) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Agustin Bello whose telephone number is (571) 272-3026. The examiner can normally be reached on M-F 8:30-6:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (571)272-3022. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AB


AGUSTIN BELLO
PRIMARY EXAMINER